

Sec. 22. 2011 10:46AM 21585 - #31583

No. 5109 P. 1/4
21878-XXXX

Product Name : FRIXION ball/Point

SDS No.:SI-110

Page 1/4

MATERIAL SAFETY DATA SHEET

Date of Issue: July 15, 2011
SDS No.: SI-110
Version: 001



1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY

This product is a writing instrument to be recognized as Article.

1.1. Identification of the substance or preparation

Product name : FRIXION ball, FRIXION Point
Product code : FX7, FXP

1.2. Use of the preparation : Ink for writing instrument

1.3. Company identification e-mail address

Name of manufacture : PILOT Corporation Of America
/ supplier
Address : 3855 Regent Blvd., Jacksonville, FL 32224
Telephone number : 904-645-9999
Working hours (from 08.30am to 04.30pm)
accsimile number : 904-996-2974

2. HAZARDS IDENTIFICATION

Physical /Chemical hazards : Not applicable
Environmental hazards : Not applicable
Effect of exposure : Not applicable
Symptom of exposure
Inhalation : Intentional exposure to ink vapors may cause respiratory irritation.
Ingestion : May cause upset stomach.
Skin contact : Ink contact with skin may cause irritation, swelling, or redness.
It is not expected to cause an allergic skin reaction.
Eye contact : Ink contact with eye may be mildly irritating.

3. COMPOSITION / INFORMATION ON INGREDIENTS

For ink unless otherwise specified

Ingredients	CAS Number	EINECS Number	Weight %	Component
Triethanolamine	102-71-6	203-049-8	1	All Colors

Sep. 22. 2011 10:47AM

No. 5109 P. 2/4

Product Name : FRIXION ball/Point

SDS No.:SI-110

Page 2/4

4. FIRST AID MEASURES

- Inhalation : Remove subject to ventilated fresh air. Consult physician if necessary.
- Ingestion : Refer for medical attention.
- Skin contact : Wash the affected area under tepid running water using a mild soap.
And refer for medical attention if irritation continues.
- Eye contact : Gently rinse the affected eyes with clean water for at least 15 minutes.
And refer for medical attention if irritation continues.
- First aid facilities : Ensure eyewash and water service are available.
- Medical attention
- Local contamination
: In case of skin or eye contamination treat as under First Aid Measures.
- Systemic poisoning
: There is no specific antidote. Treat symptoms.

5. FIRE-FIGHTING MEASURES

- 5.1. Suitable extinguishing media : Not classed as flammable.
In case of fire, use water spray, foam, dry chemical powder or carbon dioxide.
- 5.2. Extinguishing media which shall not be used for safety : None
- 5.3. Special exposure hazards arising from the substance or preparation itself, combustion products : CO₂, CO, NO_x, and SO_x are produced after combustion.
- 5.4. Special protective equipment for fire-fighters : Not required
- 5.5. Additional information : None

6. ACCIDENTAL RELEASE MEASURES

- 6.1. Personal precautions : Use proper ventilation. Use eye and skin protection.
- 6.2. Environmental precautions : Keeping away from drains, surface and ground-water and soil, possible need to alert the neighbourhood.
- 6.3. Methods for cleaning up : Absorb spill with material (cloth or paper), then place in chemical waste containers.
- 6.4. Additional information : None

7. HANDLING AND STORAGE

- 7.1. Handling : Avoid rough handling or dropping.
- 7.1.1. Protective measures : Not required in normal use.
- 7.1.2. Measures to prevent aerosol and dust generation : Not required in normal use.
- 7.1.3. Measures required to protect the environment : Not required in normal use.
- 7.1.4. Specific requirements or handling rules : None
- 7.1.5. Precautions against fire and explosion : Not required in normal use.
- 7.2. Storage : Store in a dry, cool, well-ventilated location.
- 7.3. Specific use(s) : Not use it except the ink for writing instruments.

Sep. 22. 2011 10:47AM

No. 5109 P. 3/4

Product Name : FRIXION ball/Point

SDS No.:SI-110

Page 3/4

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Exposure limit values : No data

8.1.1. Occupational exposure controls : Not available

8.1.2. Biological limit values : Not available

8.1.3. DNEL and PNEC-value(s) as applicable : No data

8.2. Exposure controls

8.2.1. Occupational exposure controls

a) Respiratory protection : Not required

b) Hand protection : Wear suitable gloves.

c) Eye protection : Wear eye protection.

d) Skin protection : Wear suitable protective clothing.

8.2.2. Environmental exposure controls

: ACGIH TLV-TWA Triethanolamine : 5 mg/m³**9. PHYSICAL AND CHEMICAL PROPERTIES**

For ink unless otherwise specified

9.1. General information

Appearance : Viscosity liquid

[Color] Black, Red, Blue, Orange, Pink, Violet, Light Green, Brown

Odor : Slight characteristic

9.2. Important health, safety and environmental information

pH : 7.5-9.5

Boiling point / boiling range : About 100 degrees Celsius

Flash point : Boils without flashing

Flammability (solid, gas) : None

Explosive properties : None

Oxidizing properties : None

Vapor pressure : No data

Relative density : 1.02-1.07 (at 20 degrees Celsius)

Solubility : Not applicable

Water solubility : Soluble

Partition coefficient: n-octanol / water : Not available

Viscosity : 550-750 mPa·s (at 20 degrees Celsius)

Vapor density : No data

Evaporation rate : No data

9.3. Other information : None

10. STABILITY AND REACTIVITY

10.1. Conditions to avoid : This material is stable.

10.2. Materials to avoid : This material is stable.

10.3. Hazardous decomposition products : No data

Sep. 22. 2011 10:40AM

No. 5109 P. 4/4

Product Name : FRIXION ball/Point

SDS No.:SI-110

Page 4/4

11. TOXICOLOGICAL INFORMATION

For ink unless otherwise specified

- | | |
|--|-----------|
| 11.1. Toxicokinetics, metabolism and distribution | : No data |
| 11.2. Acute effects (acute toxicity, irritation and corrosivity) | |
| : Acute toxicity Triethanolamine LD ₅₀ 4.92ml/kg(rat) | |
| 11.3. Sensitization | : No data |
| 11.4. Repeated dose toxicity | : No data |
| 11.5. CMR (carcinogenicity, mutagenicity, and toxicity for reproduction) | : No data |

12. ECOLOGICAL INFORMATION

- | | |
|-------------------------------------|-----------|
| 12.1. Ecotoxicity | : No data |
| 12.2. Mobility | : No data |
| 12.3. Persistence and degradability | : No data |
| 12.4. Bioaccumulative potential | : No data |
| 12.5. Results of PBT assessment | : No data |
| 12.6. Other adverse effects | : None |

13. DISPOSAL CONSIDERATIONS

- Follow all regulations in your country
- Not hazardous waste.

14. TRANSPORT INFORMATION

- | | |
|------------------------------------|------------------|
| 14.1. UN number | : Not applicable |
| 14.2. Class | : Not applicable |
| 14.3. Proper shipping name | : Not applicable |
| 14.4. Packing group | : Not applicable |
| 14.5. Marine pollutant | : Not applicable |
| 14.6. Other applicable information | : None |

15. REGULATORY INFORMATION

Suit a standard of "Safety of toys" Part3 (EN71-3)

Detrimental metallic elements are not containing.

(Antimony, Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium)

16. OTHER INFORMATION

The information here is given in good faith, but no warranty, express or implied, is made.
Final determination of suitability of any material is the sole responsibility of the user.

End of SDS